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## ABSTRACT OF THE DISCLOSURE

In a transmit power control method in a CDMA mobile communication system, it is thereby possible to change at a high speed a reference SIR used for reference in a high-speed closed loop control of an up link. The method includes the step of checking whether one or more base transceiver stations (BTSs) are connected, the step of, when a result of the checking step shows that two or more BTSs are connected, selecting CH receive SIRs (Signal to Interference Ratios) corresponding to the connected BTSs, and making a calculation by using the selected values, and the step of changing a value of a reference value Sref according to a result of calculation. The method also includes the step of, when the result of the checking shows that only one BTS is connected, setting the reference value Sref to an upper limit, and the step of reporting the changed reference value Sref to all the connected BTSs in each of the steps. In the method, it is possible to decide the reference value Sref in response to a variation in selection/synthesis gain due to an increase or a decrease of the number of connected BTSs. it is possible to change the reference SIR at a high speed in response to a variation in selection/synthesis gain due to an increase or a decrease of the number of connected BTSs.